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TARGET : NEET (UG) 2024

Course : SARANSH (Youtube Live CRASH COURSE)

I-CHEMISTRY

DPP

DAILY PRACTICE PROBLEMS

DPP NO. 2

Organic Chemistry : Periodic Table

DPP No. : 2

1. The ionisation energy of nitrogen is more than that of oxygen because

(1) Nitrogen has half filled p-orbitals

(2) Nitrogen is left to the oxygen in the same period of the periodic table

(3) Nitrogen contains less number of electrons

(4) Nitrogen is less electronegative

2. For Al which is correct

(1) $IE_3 > IE_2 > IE_1$ (2) $IE_3 > IE_1 > IE_2$ (3) $IE_2 > IE_1 > IE_3$ (4) $IE_1 > IE_2 > IE_3$

3. The second ionisation potential is

(1) Less than the first ionisation potential (2) Equal to the first ionisation potential

(3) Greater than the first ionisation potential (4) None of these

4. The correct order of second ionization potential of carbon, nitrogen, oxygen and fluorine is :

(1) C > N > O > F (2) O > N > F > C (3) O > F > N > C (4) F > O > N > C

5. The elecrton affinity value of halogens are F = 329, CI = 349, Br = 324, I = 295kJ mol^{-1}. The higher value for CI as compared to that of F is due to :

(1) Less electron-electron repulsion in CI as compare to F

(2) Higher atomic radius of F

(3) Smaller electronegativity of F

(4) More vacant P-subshell in CI

6. Electron affinity depends on :

(1) Atomic size only (2) Nuclear charge only

(3) Atomic number only (4) Atomic size and nuclear charge both

7. Among the following oxides, the least acidic is :

(1) P_4O_6 (2) P_4O_{10} (3) As_4O_6 (4) As_4O_{10}

8. Which of the following represents the correct order of increasing electron gain enthalpy with negative sign for the elements O, S, F and Cl ?

(1) O < S < F < Cl (2) F < S < O < Cl (3) S < O < Cl < F (4) Cl < F < O < S

9. Which of the following properties show gradual decrease with increase in atomic number across a period in the periodic table ?

(1) Electron affinity (2) Ionization potential

(3) Electronegativity (4) Size of atom

10. On going from right to left in a period in the periodic table the electronegativity of the elements :

(1) Increases

(2) Decreases

(3) Remain unchanged

(4) Decreases first then increases

11. Which element has the highest electronegativity :

(1) F (2) He

(3) Ne (4) Na

12. Which of the following relation is correct if EN value is on Mulliken scale and IP & EA are in eV :

(1) 2 I.P. – E.A. – E.N. = 0 (2) 2 I.P. – E.A. + E.N. = 0

(3) 2 E.N. – I.P. – E.A. = 0 (4) E.N. – I.P. – E.A. = 0

Answer Key

1.	(1)	**2.**	(1)	**3.**	(3)	**4.**	(3)	**5.**	(1)	**6.**	(4)	**7.**	(3)
8.	(1)	**9.**	(4)	**10.**	(2)	**11.**	(1)	**12.**	(3)				